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## SUEZ AND PANAMA.

BY FREDERIC COURTLAND PENFIELD, AUTHOR OF "PRESENT-DAY EGYPT."

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STUDENTS of canal affairs may agree that it is a misfortune for a nation to possess a site for a waterway connecting oceans and demanded by the necessities of commerce. The cases of Suez and Panama are not dissimilar; the former caused the administration of Egypt to pass to an alien race, while the latter resulted in the loss to a sovereign people of the isthmian route and enough territory with it to form a newcomer among nations.

The history of the Suez Canal is as replete with incident of intrigue and disappointment, and the blighting of human vanity, as any book of fiction; and no Lorelei ever lured more souls to destruction than the sand waste between Port Saïd and Suez.

The canalization of the Suez isthmus as a project antedated the Bible, probably harked back to the beginning of things. Six centuries before the Christian era, Necho, the legend runs, was so impressed by the prophecy of his favorite oracle—that if he persisted in his ambition to unite the Red Sea with the Mediterranean, Egypt would become involved in foreign entanglements and then be lost to the Egyptians—that he heeded the prophecy. In the nineteenth century of our Lord the hoary warning had a considerable measure of fulfilment, certainly; for the construction of the canal brought about indirectly the administration of the Nile country by Great Britain, and surrender of control of the national cash-box to Britain and five other European governments. The irony of these facts is heightened when it is recalled that the country through which the waterway runs owns or controls not one share in the Suez company, nor derives a tittle of benefit from its enormous earnings.

The consummation of the Suez scheme elevated a French diplo-

matist into the fickle gaze of the world, as reward for accomplishing what rulers of Egypt, from Seti, father of Rameses the Great, to Napoleon, had sought to do. De Lesseps's triumph cost the lives of hundreds of thousands of human beings, goaded by the lash to dig the great trench; and caused Khedive Ismaïl, throbbing with desire to be a factor in the world, to be driven into life exile as penalty for mortgaging almost the souls of his subjects to secure money for the alluring project. And the superlative mockery of fate is that this canal, benefiting Egypt in no manner, is to-day controlled by England, which obstinately resisted its construction. Ismaïl died disgraced in banishment, as punishment for running amuck with the money-lenders; and Ferdinand de Lesseps, who had been the Great Frenchman, was saved from the fate of a financial charlatan through being bereft of intellect in the closing years of his life.

Prior to giving the canal concession in 1856, Egypt had no debt whatever, and her credit was first pledged to enable the Khedive to subscribe \$17,000,000 to the enterprise, although it was stipulated in the concession that the affair was to cost Egypt nothing, and that for ninety-nine years the country was to receive fifteen per cent. of its gross revenue. There were investors in the scheme, of course; but it seemed as if Egypt was ever feeding the insatiable monster with money, as well as with human life. Usurers of Europe had fat pickings through easy-going Ismaïl, who, when he saw that his days on the throne were numbered, sold his personal shares in the canal to the English government for \$20,000,000, on which the Egyptian treasury was mulcted for five-per-cent. interest for twenty years after their transfer. This purchase proved Beaconsfield's shrewdness, for by an action sensationally prompt he prevented the shares from going to France. To-day they are worth four times what was paid for them, and they secure to Britain voting control in canal matters. Egypt's fifteen-per-cent. interest in the tolls was marketed to secure a few millions with which to complete the canal. Had Ismaïl not burdened his country with debts, there would have been no Arabi rebellion, and no British "occupation" of the Land of the Nile, it is safe to say.

The Suez waterway is a fraction under a hundred miles in length, and cost approximately \$100,000,000. The difficulties encountered in its building were not those to be dealt with by engi-

neering skill; and De Lesseps was ever face to face with financial and political obstacles that taxed his resources as negotiator and diplomatist. The canal was in no sense an engineering achievement; the isthmus of sand, washed by seas of identical levels, was pierced by the crudest form of labor, practically unassisted by machinery. Excavators and dredgers of the character employed on the Chicago drainage canal could duplicate the Suez cutting for \$25,000,000, experts insist. Thirteen years after the Suez concession was granted, the canal was opened to traffic on March 18th, 1869—and, strange augury, the first vessel to pay toll flew the British ensign.

The canal destroyed Egypt's considerable railway traffic between Alexandria and Suez, besides bringing to the land the foreign domination foreshadowed by the oracle of King Necho's period. Of the never-ending flow of humanity using the canal, few, probably, think of or know the pathetic chapters of its history. It has revolutionized shipping methods and avenues of trade, besides driving the sailing ship from the ocean.

The canal's value to commerce is sufficiently proven by the shortening of distances, compared with the old route around the Cape of Good Hope. By the latter the distance between England and Bombay is 10,860 miles, by the canal 4,620 miles; from St. Petersburg to Bombay by the Cape is 11,610 miles, and by the canal 6,770 miles; and from New York to Bombay by the Cape route the distance is 11,520 miles, while by the canal it is 7,920 miles. How rapidly the traffic attracted by economy of distance and time thus effected has developed, the following statistics, taken quinquennially from the Suez company returns, show:

Year.	Steamers.	Tonnage.	Receipts in Francs.
1871 .....	765	761,467	7,595,385
1876 .....	1,457	2,096,771	27,631,455
1881 .....	2,727	4,136,779	47,193,880
1886 .....	3,100	5,767,655	54,771,075
1891 .....	4,206	8,669,020	83,421,500
1896 .....	3,407	8,594,307	79,652,175
1901 .....	3,699	10,823,840	100,386,397

Some readers may be surprised to learn that the current use of the Suez Canal averages only ten ships daily. Ten or twelve years ago, 75 per cent. of the vessels passing the canal were under the British flag; but in recent years there has been a gradual falling off in the number of English ships, due chiefly to the

systematic effort that Germany is making to develop new markets in the Far East and in Australasia. But the British flag still represents two-thirds of the traffic. Next to England, Germany is the principal user; the Dutch flag comes third, while the tri-color of France is fourth in the list. Not for many years have the Stars and Stripes been seen in the canal over a commercial vessel, yet cargoes to or from the United States employ the canal frequently, nearly always in British bottoms. A few war-ships and transports going to or returning from the Philippines, and two or three yachts, usually comprise the annual volume of American representation.

Last year, all vessels passing through the canal were of the mercantile marine, with the exception of 97 men-of-war, 56 military transports, and 9 yachts. The heaviest user of the "universal turnstile" is England's Peninsular & Oriental Company, which last year paid tolls on 213 steamers. The Ocean Steamship Company, plying between England and Australia, was represented by 145 ships, the Hansa Company by 160, the Messageries Maritimes by 155, the North German Lloyd by 95, and the Clan Line of freighters by 129.

The economy in using the canal is effected through saving of time. The present toll is \$1 70 on vessel tonnage, and \$2 for every passenger, not counting ship's crew. Since electric lights for night-steaming came into use, it requires from fourteen to eighteen consecutive hours to make the passage from entrance to exit. The tariff for a large steamer, like a liner of the Peninsular & Oriental Company, or a troop-ship filled with soldiers, is not infrequently \$10,000.

The gross revenue nowadays is slightly in excess of 20 per cent. on the capitalization, and net earnings about 11 per cent., figures indicating remarkable prosperity, and explaining the popularity in which Suez securities are regarded by investors.

The ordinary width of the canal at the water-line is 328 feet, and at the base 72 feet; but where there are deep cuttings, the superficial width narrows to 190 feet. The mean depth from end to end is 26 feet. In places the canal is dredged to a depth of 30 feet, and it is the intention to deepen the canal throughout, to accommodate the increasing size of battle-ships and passenger-steamers. The slope of the canal-banks at the water-line is one inch in five, and there are about twelve miles of masonry at points

where the sand is loose and easily disturbed. These retaining-walls are being extended every year, and in time they will inclose the canal from one end to the other, being omitted in the Bitter Lakes, of course.

There are more contrasts than resemblances between the Suez and Panama projects, but each is as old as the limits of history admit. The conception of a Central-American canal belongs probably to the intelligent man who, from the jungle-laden rib of the isthmus, first saw the Caribbean and the Pacific. A century before the landing of the Pilgrim Fathers on Plymouth Rock, Spanish adventurers were informing Charles V of Spain of the opportunity to merge the waters of sea and ocean in the New World. Intuitively they perceived the importance of such an achievement, although it required the modern geographer to prove that from Colon to Panama by water is eight thousand miles, instead of forty-seven in a line conveniently direct. In 1550, one Galvao, a Portuguese navigator, wrote a book to prove the feasibility of an artificial connection between the Atlantic and the Pacific; and in 1780 a scientific commission from Spain studied the three Central-American routes—Panama, San Blas and Nicaragua. These are simple facts to be pondered over by busy people, who may possibly be in doubt as to whether the "Father" of the isthmian enterprise was De Lesseps, Senator Morgan or Admiral Walker.

The employment of great canals by commerce must ever depend upon economic considerations.

Already acknowledging our commercial predominance, Europeans are not blind to the real purpose of the Panama Canal. But whenever it is an open choice between the canal toll and the equivalent of time at sea, the Briton will be slow to decide in favor of contributing to the resources of a nation rising in brief time to commercial premiership; and Frenchmen, economists by nature, will take a similar view, as will Germans and shippers of other nations. Expressed in the fewest words, the employment of the Panama route will be governed exclusively by self-interest, computed from the standpoint of material economy.

The Suez route effects a saving in cost of transit between Europe and the Far East equal to 3,000 miles of sea-distance, counting time, fuel, wages and other expenses. Panama tolls cannot consistently be in excess of those of Suez; if identical—\$1 70

per ton—the “limit of economy” should be practically the same, giving ship owner or captain the choice between the cost of canal transit and 3,000 miles of sea travel.

Suez will always be favored by European shipmasters determining routes for cargoes in which Panama and Suez present advantages practically equal; probably the expense of a few hundred miles additional travel would not cause them to break from the old route, on which there is no risk of accident or delay from canal locks. A considerable percentage of the over-sea-carrying trade controlled by British bottoms is geographically independent of canals, and will always be. For example, the bulk of traffic to and from the west coast of South America—the rich nitrate trade of Iquique and Valparaiso—will not ordinarily be altered by the Panama Canal. The economy of distance from the latter port to England and the Continent by the canal being only about 1,500 miles, this traffic, except under unusual circumstances, will continue, as long as it goes in British vessels, to round the extremity of South America; while, as the canal will shorten the distance between the nitrate fields contiguous to Iquique and their customers in Europe only a trifle over the 3,000-mile “limit of economy,” much benefit cannot be expected from that source.

The table, printed on the opposite page, condensed from several comparative statements prepared by the Government, shows at a glance the saving in nautical miles to be made possible by the Panama Canal between leading Atlantic and Pacific ports.

By way of Panama, the water distance between New York and San Francisco is to be shortened 8,000 miles, and practically the same to Yokohama, Shanghai, the Philippines and Hawaii. New Orleans will benefit even in greater measure. Better still, every town on the Mississippi River from St. Louis to New Orleans will be endowed by the canal with advantages exceeding those of seacoast towns and cities. A generation hence the movement of traffic down the Mississippi, on the way to the isthmus, is certain to be enormous.

Singapore will be the Asiatic port differentiating the attracting power of the Panama and Suez canals, speaking from the basis of Atlantic and Gulf ports as points of origin or destination. Cargoes for places beyond the 105th degree of east longitude will logically be sent through the Mediterranean and the Suez Canal. But the area east of the Singapore degree of longitude is teeming

ECONOMY IN SEA MILES BETWEEN ATLANTIC PORTS AND PACIFIC PORTS VIA PANAMA  
CANAL OVER PRESENT ROUTES.

From	To either San Francisco or Port Townsend.	To Guayaquil	To Callao.	To Iquique.	To Valparaiso.	To Yokohama, via San Francisco.	To Shanghai, via San Francisco and Yoko- hama.	To Manila, via San Francisco and Yoko- hama.	To Sydney, via Tahiti	To Melbourne, via Ta- hiti and Sydney.	To Wellington, via Ta- hiti.
New York.....	7,945	7,559	6,353	5,200	3,831	7,945	8,025	7,945	4,708	4,708	4,708
Norfolk.....	8,073	7,687	6,471	5,328	3,937	8,072	8,152	8,072	4,636	5,203	4,836
Charleston.....	8,281	7,895	6,679	5,518	4,167	8,371	8,478	8,656	5,044	5,064	5,044
Port Tampa.....	8,791	8,425	7,209	6,066	4,697	8,811	8,891	8,811	5,574	5,592	5,574
New Orleans.....	8,942	8,560	7,344	6,201	4,832	8,946	9,026	8,936	5,709	5,709	5,709
Galveston.....	9,027	8,641	7,426	6,283	4,914	9,027	9,107	9,027	5,790	5,790	5,790
Liverpool.....	5,806	5,021	4,204	3,061	1,692	5,806	5,886	5,806	2,569	2,569	2,569
Hamburg.....	5,777	5,391	4,175	3,032	1,463	5,777	5,857	5,777	2,540	2,540	2,540
Antwerp.....	5,791	5,405	4,199	3,046	1,677	5,791	5,871	5,791	2,554	2,554	2,554
Bordeaux.....	5,761	5,365	4,159	3,116	1,647	5,761	5,841	5,761	2,524	2,524	2,584
Gibraltar.....	5,071	4,685	3,488	2,326	957	4,801	5,751	5,072	1,838	3,466	1,834

with opportunity for Panama cargoes. The isthmian short cut to Oceanica and Asia, comprising the coastal section of China's vast empire (not to be permitted by the Powers to remain dormant), enterprising Japan, the East Indies, Australia, New Zealand, and our own Philippine archipelago, is the world's most potential area. The awakened Orient can use American products to a practically limitless extent. One-third of the trade of these lands would make America great as a world-provider, and could be secured if we embarked seriously in an effort to obtain it. Students of economics have never admitted the logic of America's sending cotton to England, to be there converted into fabric for clothing half the people of the East.

South America's Pacific coast, too remote now for American products and manufactures to have even a foothold, should be wrested from the British and Germans when the canal is completed—for Guayaquil, Callao, Iquique and Valparaiso will then be placed in intimate touch with New York and New Orleans: they are remoter without the canal than antipodean ports. The natural market for South America's west coast, when the canal is in operation, will be the United States; and its banking should be done through New York rather than London and Hamburg. Skeptics will say that the nitrates of Chile and Peru are not required in the States, that perforce they must go to Europe. In a way this is true; but an innovation is possible by which vessels under the Stars and Stripes may capture the west-coast traffic from competing flags and hold it in permanent control.

Let the reader, content in the belief that our manufactures have an extensive use in the outer world, investigate the subject, and his reward will be to learn that *we export only a trifle more than three per cent. of what we manufacture*. Let him, also, study the statistics of our commerce with South America, natural products and manufactures of every sort—they are replete with astonishing facts. To discover that our exports to the southern continent do not exceed one dollar *per capita* of South America's population, will surprise the investigator, doubtless; and that the volume of trade has been practically stationary for years will likewise be disconcerting. South America has 40,000,000 people; but Mexico's 13,500,000 inhabitants buy more from Uncle Sam than the South Americans. We now sell Canadians annually products averaging \$24 *per capita*.

The reason for the startling disparity in the statistics of trade intercourse with our adjoining neighbors, Canada and Mexico, and oversea South America, is, obviously, the lack of transportation facilities under the American flag; and the adage that "trade follows the flag" has earned more significance than attaches to a mere figure of speech. We pay South America yearly about \$120,000,000 for coffee, wool, hides and other raw products; and the major share of this money is expended in Europe for necessities and luxuries of life.

If the Chamberlain preferential tariff programme wins in England, the product of Manitoba's wheat-fields can be landed in the British Isles for twelve cents a bushel less than grain grown in the States—incentive enough, Mr. James J. Hill assures us, to cause Manitoba ten years hence to produce all the wheat that Britain would have to import. If this comes to pass, Uncle Sam must look to the Orient for a customer. China, already a considerable user of our wheat and flour, when American trade in the East is under fair headway, will consume twice as much of the products of our land as go now to Great Britain. Mr. Hill's Great Northern railway prepared for Asiatic trade by constructing in a Connecticut shipyard the two largest freighters in existence. The substitution of an Oriental for a European country, as a grain customer, cannot be helpful to Panama, for our shipments would be from Pacific ports, and Manitoba's product would seek a Canadian Atlantic port.

Mr. Thompson, United States Minister to Brazil, reports that country as being so desirous of American trade that its government voluntarily makes tariff reductions on flour and several other articles without reciprocal concessions on our part. We now send \$500,000 worth of flour annually to Brazil; five years ago, her flour bill with Uncle Sam was \$1,800,000. Minister Thompson, discussing the preference of Brazil for American products and manufactures, says:

"I feel that if the merchants of my country take advantage of the improved tariff conditions in Brazil our trade there should jump in a few years to \$30,000,000. . . . I hate to see merchants of other countries grabbing what our countrymen can have if they reach out for it."

This entertaining expression of opinion may not be germane to canal topics, save that Brazil cannot be different in its attitude

to United States trade from other Spanish-American countries. Britain has long enjoyed the bulk of the business with the southern continent, as the reward of systematically exploiting the field years ago; but the German trader, selling German goods, delivered in German ships, is gradually elbowing John Bull out, and means to have the business of South and Central America.

The kernel of Minister Thompson's observation on American trade possibilities in Brazil is summed up in the words: "Reach out for it."

How this "reaching out" is to be accomplished, making its effect reasonably permanent, calls for brief consideration only. It should be a movement led or openly supported by the Government, it should be thorough, and it should be conducted on lines of equity and logic. No mercantile body, however zealous, can prosecute the work with reasonable chance of success. A dozen propagandas, aimed at trade extension throughout South America and Caribbean countries and islands, have been tried by American commercial bodies; but, lacking the cooperation of the Government, all failed in their purpose. Editorial campaigns of trade journals have been helpful for a time. Every nation in Europe whose foreign trade is worth considering exploits foreign countries in the thorough manner of a great commercial house—getting business by the most productive, not the easiest, methods. With several governments, the commercial *attaché* of legation or embassy is quite as important as the officer detailed by army or navy. Little good comes of circularizing legations and consulates with advertisements printed, perhaps, in dual languages. Secretary-of-State Blaine appreciated the importance to this country of Latin-American trade; but his plan for securing this was never fully made public. Probably reciprocal tariffs represented the academic side only of his programme. The new Department of Commerce, cooperating with the Department of State, and having the active assistance of our diplomatic and consular officers in South and Central America, might take the matter in hand with practically certain chances of success.

In previous contributions to the REVIEW, I have insisted that the isthmian canal, "destined to make the United States the trade arbiter of the world," could never be expected to "pay" directly. The artificial waterway is to cost a vast deal of money; with the payments to the French company and to the republic of Panama,

added to the sum necessary to the completion of the work, Uncle Sam's expenditure cannot be less than \$225,000,000! It will probably be more. A private incorporation embarked in the enterprise would hold that the investment was entitled to five-per-cent. interest, say, and in time be funded. The money of the nation, embarked in a project distinctly commercial, merits a reasonable rate of income or benefit—four per cent., certainly. To operate the canal, with the expensive up-keep essential to a region of torrential rains, cannot be less than \$4,000,000 annually; if the Chagres River refuses to be confined in bounds, the cost will be greater. The items of yearly expense figured here total \$13,000,000—a sum to be regarded as the very minimum of the cost of maintaining and operating the canal.

Optimistic students of ocean-transportation statistics say the canal will draw 10,000,000 tons of shipping a year; others, conservative of opinion, say half this volume. Taking the mean of these estimates, I hazard the statement that, six years after the canal is opened, the tonnage will be 7,500,000. The Suez Canal was operated more than thirty years before its business aggregated 10,000,000 tons; and, to produce this volume, several reductions in tolls were necessary. The American Government cannot properly levy a heavier tribute at Panama than is demanded at Suez, for the fact is our canal will not be as essential as that uniting Europe and the East. A like tariff would produce for Uncle Sam, on the hypothesis of a business of 7,500,000 tons, only \$12,750,000 a year; a higher tariff would probably produce less. And here is an unpalatable truth—Panama's earnings from passengers can never be considerable, compared with that constantly ebbing and flowing of humanity, between the home countries of Europe and their dependencies in Asia, Africa and Australasia. The *direct* increment of the canal cannot for many years yield what in a commercial enterprise could be called a "profit."

The way to compel the canal to pay *indirectly* is to make it incidental to the development of a mighty commercial marine, that will carry American products to present foreign markets, and to new markets, under the Stars and Stripes. With operations under way on the isthmus, is not the time propitious for popular discussion throughout the nation, and in official Washington, how best to *create* the commerce that will make the Panama Canal a success from its opening?

We have populated the country, developed resources of field, forest and mine, and devised matchless ways of translating natural products into finished articles appealing to all mankind. Now, let us cease sending these products of soil and workshop to market in British ships; let us forward them in vessels constructed in American shipyards, thereby making the transaction independently American. Already have we produced ocean carriers equal to the best; while American war-ships, native from keel to topmast truck, are the envy of the world. The perfecting of the turbine engine may mark a new era in shipbuilding, and mercantile craft dependent on older systems of machinery may in a few years be unable to compete with the new order of things.

In but one department of national growth is the United States backward—shipping, in its broad and commercial acceptance. To promote it should now be the plan of both political parties.

Our canal can never pay until we enter as shipowners into competition with Europe's trading nations, and these possess a material interest in the Suez undertaking. The commercial fleet at present under the American flag could not pay a tenth of Panama's operating expenses. When we seriously embark upon the work of creating a great merchant marine, we are going to rouse spirited opposition. Englishmen, Germans and Frenchmen will not like it; Europeans cannot be expected to take any interest in the welfare of our national canal, and all may object to fattening the treasury of a country that is their trade competitor. These facts, insignificant as they may seem, prove in reality the need for supplying hundreds of ocean carriers under the same flag as that flying over the canal zone.

By the time the canal is opened, the United States will have 100,000,000 inhabitants; and agriculture, assisted by ordinary methods and by irrigation, will have developed to an extent that will make our commodities dictators of supply and price. By that time, sea transportation cannot be regarded as a competitor of transcontinental railway systems that have done much towards making the country what it is: water transportation will be found a necessary adjunct to rail facilities, relieving the roads of some of their through traffic, claimed even now to be unprofitable.

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